



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/623,865	11/08/2000	Otto Plank	PA 29584	9306

7590

06/04/2003

RICHARD B HOFFMAN
MARSHALL, GERSTEIN & BORUN
6300 SEARS TOWER
233 South Wacker Drive
Chicago, IL 60606-6402

EXAMINER

COZART, JERMIE E

ART UNIT

PAPER NUMBER

3726

DATE MAILED: 06/04/2003

21

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/623,865

Applicant(s)

PLANK, OTTO

Examiner

Jermie Cozart

Art Unit

3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/15/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 7-12 and 14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 4,202,279 (DE`279) in view of Ashby et al.

DE`279 discloses producing a rim hole through a first and second planar workpiece (11, 12), providing an oblong rim hole (not labeled) by translating an oblong punch (7) in a first direction, from a first position to a second position relative to a fixed matrix (2). DE`279 also discloses forming an oblong rim hole using the first planar workpiece (11) such that the oblong rim is formed adjacent to an inner surface of the matrix (2), and forming the oblong rim into a single layer flange engageable with a bottom surface of the second planar workpiece (12). The flange is formed using an oblong flange punch (50). The flange punch engages the flange from a second direction that is linearly opposite the first direction. DE`279 discloses the oblong punch (7) having a first working surface (17) to form a penetration opening and a second working surface (16) to form the oblong rim adjacent to the inner surface of the matrix (2). See abstract and Figures 1, 2, and 6 for further clarification.

DE`279, however, does not disclose forming an oblong penetration opening through the first and second planar workpieces by translating an oblong punch in a first direction to a first position, forming against a working edge of the fixed matrix, an oblong break away portion in the second planar workpiece. DE`279 also does not disclose whether the first and second planar workpieces are metal, providing a round penetration, punching the rim hole using a round punch, the round penetration hole being formed using a punch having a transition surface and a body surface. DE`279 also does not disclose the transition surface engaging at least one of the plurality of planar workpieces to promote the separation of the annular break away and form the annular rim adjacent to the body surface, or the annular break away being formed against a working surface of the matrix and the annular rim being formed adjacent to an inner surface of the matrix.

Ashby discloses forming a penetration opening (not labeled) through the first and second planar workpieces (82, 84) by translating the punch (54) in a first direction to a first position, forming against a working edge of the fixed matrix (74), a break away portion (88) in the second planar workpiece. Ashby discloses the first and second planar workpieces (82, 84) being metal, and providing a round penetration, punching the rim hole using a round punch (54), the round penetration hole being formed using a punch having a transition surface and a body surface. Ashby discloses disclose the transition surface (not labeled) engaging at least one of the plurality of planar workpieces (82, 84) to promote the separation of the annular break away and form the annular rim adjacent to the body surface, and the annular break away (88) being formed

against a working surface of the matrix (74) and the annular rim being formed adjacent to an inner surface of the matrix. See *column 4, line 23 – column 5, line 30, and Figures 6-8 for further clarification.*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to form the penetration opening of DE`279 through the first and second planar workpieces by translating an oblong punch in a first direction to a first position, form a break away portion in the second planar workpiece against a working edge of the fixed matrix, to form the first and second planar workpieces from metal, to provide a round penetration, to punch the rim hole using a round punch, such that the round penetration hole is formed using a punch having a transition surface and a body surface, wherein the transition surface engages at least one of the plurality of planar workpieces to promote the separation of the annular break away and form the annular rim adjacent to the body surface, such that the annular break away is formed against a working surface of the matrix and the annular rim is formed adjacent to an inner surface of the matrix, in light of the teachings of Ashby, in order to effectively fasten together two sheets by deformation.

Claims 7-11 and 17-21

DE`279/Ashby as modified discloses all of the claimed subject matter except for producing an oblong rim hole and oblong break away.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to provide the punch with a configuration capable of producing an oblong rim hole and oblong break away because Applicant has not disclosed that producing an oblong rim hole and

oblong break away provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with an rim hole and annular break away in order to effectively fasten the two metal sheets together.

Therefore, it would have been an obvious matter of design choice to modify DE`279/Ashby to obtain the invention as in claims 7-11 and 17-21.

3. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over DE`279/Ashby as applied to claims 1-12 and 14-21 above, and further in view of Speller, Sr. (5,042,137).

DE`279/Ashby as modified above discloses all of the claimed subject matter except for the round penetration opening being formed using a circular drill.

Speller, Sr. discloses a round penetration opening being formed using a circular drill (40). *See column 8, lines 48-65, and Figures 1 and 9 for further clarification.*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to form the round penetration opening of DE`279/Ashby using a circular drill, in light of the teachings of Speller, Sr., in order to effectively provide an alignment to aid in assembly.

Response to Arguments

4. Applicant's arguments with respect to claims 7-21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Telephone inquiries regarding the status of applications or other general questions, by persons entitled to the information, should be directed to the group clerical personnel. In as much as the official records and applications are located in the clerical section of the examining groups, the clerical personnel can readily provide status information. M.P.E.P. 203.08. The Group clerical receptionist number is (703) 308-1148.
6. If in receiving this Office Action it is apparent to applicant that certain documents are missing, e.g., copies of references cited, form PTO-1449, form PTO-892, etc., requests for copies of such papers or other general questions should be directed to Tech Center 3700 Customer Service at (703) 306-5648, or fax (703) 872-9301 or by email to CustomerService3700@uspto.gov.
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermie Cozart whose telephone number is 703-305-0126. The examiner can normally be reached on Monday-Thursday, 7:30 am - 6:00 pm.
8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Vidovich can be reached on 703-308-1513. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Art Unit: 3726

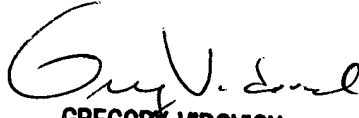
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

Other helpful telephone numbers are listed for applicant's benefit.


Allowed Files & Publication	(703) 308-6789 or (888) 786-0101
Assignment Branch	(703) 308-9723
Certificates of Correction	(703) 305-8309
Drawing Corrections/Draftsman	(703) 305-8404/8335
Petitions/Special Programs	(703) 305-9285
Terminal Disclaimers	(703) 305-8408
PCT Help Desk	(703) 305-3257

If the information desired is not provided above, or a number has been changed, please call the general information help line below.

Information Help line	1-800-786-9199
Internet PTO-Home Page	http://www.uspto.gov


GREGORY VIDOVICH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

JC


May 30, 2003